## IN THE CLAIMS

- 1. (Original) Superabsorbent particles comprising:
- (i) about 50% to about 95%, by weight, of a superabsorbent polymer; and

Docket No.: 29827/40800

- (ii) about 5% to about 50%, by weight, of a clay, said particles prepared by a method comprising the steps of:
- (a) polymerizing an unneutralized monomer capable of providing a superabsorbent absorbent polymer in the presence of an internal crosslinking monomer to form a superabsorbent polymer hydrogel;
- (b) comminuting the superabsorbent polymer hydrogel to form superabsorbent polymer hydrogel particles;
- (c) admixing a clay with the superabsorbent polymer hydrogel particles to form superabsorbent polymer-clay hydrogel particles;
- (d) then neutralizing the superabsorbent polymer-clay hydrogel particles by adding a sufficient amount of a neutralizing agent to neutralize the hydrogel particles 50% to 100%, by weight; and
- (e) drying the neutralized superabsorbent polymer-clay hydrogel particles of step (d) to provide the superabsorbent particles.
- 2. (Original) The particles of claim 1 wherein the method further comprises:
  - (f) surface crosslinking the superabsorbent particles of step (e).
- 3. (Previously presented) The particles of claim 1 wherein the superabsorbent polymer is present in an amount of about 60% to about 90%, by weight, and the clay is present in an amount of about 10% to about 40%, by weight.
- 4. (Previously presented) The particles of claim 1 wherein the superabsorbent polymer comprises a polymerized  $\alpha,\beta$ -unsaturated carboxylic acid, or a salt or an anhydride thereof.

- Docket No.: 29827/40800 Amendment dated July 31, 2007 Reply to Office Action of April 6, 2007
- (Previously presented) The particles of claim 1 wherein the unneutralized monomer is selected from the group consisting of acrylic acid, methacrylic acid, ethacrylic acid,  $\alpha$ -chloroacrylic acid,  $\alpha$ -cyanoacrylic acid,  $\beta$ -methylacrylic acid,  $\alpha$ phenylacrylic acid,  $\beta$ -acryloxypropionic acid, sorbic acid,  $\alpha$ -chlorosorbic acid, angelic acid, cinnamic acid, p-chlorocinnamic acid,  $\beta$ -stearylacrylic acid, itaconic acid, citraconic acid, mesaconic acid, glutaconic acid, aconitic acid, maleic acid, fumaric acid, tricarboxyethylene. maleic anhydride, vinyl sulfonic acid, allyl sulfonic acid, vinyl toluene sulfonic acid, styrene sulfonic acid, sulfoethyl acrylate, sulfoethyl methacrylate, sulfopropyl methacrylate, sulfopropyl acrylate, sulfopropyl methacrylate, 2-hydroxy-3methacryloxypropyl sulfonic acid, 2-acrylamide-2-methylpropane sulfonic acid, methacryloxy ethyl phosphate, and mixtures thereof.
- 6. (Previously presented) The particles of claim 1 wherein the superabsorbent polymer is selected from the group consisting of poly(acrylic acid), a hydrolyzed starch-acrylonitrile graft copolymer, a starch-acrylic acid graft copolymer, a saponified vinyl acetate-acrylic ester copolymer, a hydrolyzed acrylonitrile copolymer, a hydrolyzed acrylamide copolymer, an ethylene-maleic anhydride copolymer, an isobutylenemaleic anhydride copolymer, a poly(vinylsulfonic acid), a poly(vinylphosphonic acid), a poly(vinylphosphoric acid), a poly(vinylsulfuric acid), a sulfonated polystyrene, salts thereof, and mixtures thereof.
- (Previously presented) The particles of claim 1 wherein the 7. superabsorbent polymer is selected from the group consisting of a poly(vinylamine), a poly(dialkylaminoalkyl (meth)acrylamide), a polyethylenimine, a poly(allylamine), a poly(allylguanidine), a poly(dimethyldiallylammonium hydroxide), a quaternized polystyrene derivative, a guanidine-modified polystyrene, a quaternized poly((meth)acrylamide) or ester analog, a poly(vinylguanidine), salts thereof, and mixtures thereof.
- 8. (Previously presented) The particles of claim 1 wherein the superabsorbent polymer comprises polyacrylic acid neutralized about 25% to 100%.
- 9. (Previously presented) The particles of claim 1 wherein the clay is a swelling clay selected from the group consisting of montmorillonite, saponite, nontronite,

Application No. 10/522,937 Docket No.: 29827/40800 Amendment dated July 31, 2007

Reply to Office Action of April 6, 2007

laponite, beidelite, hectorite, sauconite, stevensite, vermiculite, volkonskoite, magadite, medmontite, kenyaite, and mixtures thereof.

10. (Previously presented) The particles of claim 1 wherein the clay is a nonswelling clay selected from the group consisting of a kaolin mineral, a serpentine mineral, a mica mineral, a chlorite mineral, sepolite, palygorskite, bauxite, and mixtures thereof.

- 11. (Original) The particles of claim 10 wherein the nonswelling clay comprises a kaolinite.
- 12. (Previously presented) The particles of claim 1 wherein the clay is an organophilic clay having an organic component and an inorganic component.
- 13. (Original) The particles of claim 12 wherein the inorganic component of the organophilic clay comprises smectite, bentonite, hectorite, montmorillonite, beidelite, saponite, stevensite, nontronite, illite, attapulgite, a zeolite, fuller's earth, and mixtures thereof.
- 14. (Previously presented) The particles of claim 12 wherein the inorganic component of the organophilic clay comprises montmorillonite.

component of the organophilic clay comprises

15. (Previously presented) The particles of claim 12 wherein the organic

Docket No.: 29827/40800

$$\begin{bmatrix} R_2 \\ R_1 - N - R_4 \\ R_3 \end{bmatrix}$$

wherein  $R_1$  is an alkyl group having at least 20 carbon atoms,  $R_2$  is hydrogen, benzyl, or an alkyl group having at least 10 carbon atoms, and  $R_3$  and  $R_4$ , independently, are a lower alkyl group;

wherein R<sub>5</sub> is CH<sub>3</sub> or C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>, R<sub>6</sub> is C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>, and R<sub>7</sub> and R<sub>8</sub>, independently, are alkyl groups containing long chain alkyl radicals having 14 to 22 carbon atoms; or a mixture thereof.

- 16. (Previously presented) The particles of claim 12 wherein the organophilic clay is selected from the group consisting of dimethyl benzyl (hydrogenated tallow) ammonium bentonite, methyl benzyl di(hydrogenated tallow) ammonium bentonite, dimethyl di(hydrogenated tallow) ammonium bentonite, methyl bis(2-hydroxyethyl) octadecyl ammonium bentonite, a bentonite clay treated with an amine containing three to eight carbon atoms, and mixtures thereof.
- 17. (Previously presented) A method of absorbing an aqueous medium comprising contacting the medium with the superabsorbent particles of claim 1.
- 18. (Original) The method of claim 17 wherein the aqueous medium contains electrolytes.

Application No. 10/522,937 Amendment dated July 31, 2007

Reply to Office Action of April 6, 2007

19. (Original) The method of claim 18 wherein the electrolyte-containing aqueous medium is selected from the group consisting of urine, saline, menses, and blood.

Docket No.: 29827/40800

- 20. (Previously presented) An absorbent article comprising the superabsorbent particles of claim 1.
- 21. (Original) The article of claim 20 wherein the article is a diaper or a catamenial device.
- 22. (Previously presented) A diaper having a core, said core comprising at least 10% by weight of the superabsorbent particles of claim 1.
- 23. (Original) The diaper of claim 22 wherein the core comprises 20-80% by weight of the superabsorbent particles.
- 24. (Previously presented) The diaper of claim 22 further comprising a topsheet in contact with a first surface of the core, and a backsheet in contact with a second surface of the core, said second core surface opposite from said first core surface.
- 25. (Original) The diaper of claim 24 further comprising an acquisition layer disposed between the topsheet and the core.

Application No. 10/522,937 Amendment dated July 31, 2007

Reply to Office Action of April 6, 2007

26. (Original) A method of manufacturing superabsorbent polymer-clay particles comprising the steps of:

Docket No.: 29827/40800

- (a) forming an aqueous monomer mixture comprising (i) at least one monomer, in an unneutralized form, capable of forming a superabsorbent polymer, (ii) an internal crosslinking monomer, and (iii) a polymerization catalyst;
- (b) polymerizing the monomer in the aqueous mixture to form a superabsorbent polymer hydrogel;
- (c) comminuting the superabsorbent polymer hydrogel to provide superabsorbent polymer hydrogel particles;
- (d) admixing a clay with the superabsorbent polymer hydrogel particles to form superabsorbent-clay hydrogel particles;
- (e) neutralizing the superabsorbent polymer-clay hydrogel particles by adding a base to the superabsorbent polymer-clay hydrogel particles; and
- (f) drying the neutralized superabsorbent polymer-clay hydrogel particles for a sufficient time at a sufficient temperature to provide dry superabsorbent polymer-clay particles.
- 27. (Previously presented) The method of claim 26 wherein the monomer capable of forming the superabsorbent polymer is selected from the group consisting of acrylic acid, methacrylic acid, ethacrylic acid,  $\alpha$ -chloroacrylic acid,  $\alpha$ -cyanoacrylic acid,  $\beta$ -methylacrylic acid,  $\alpha$ -phenylacrylic acid,  $\beta$ -acryloxypropionic acid, sorbic acid,  $\alpha$ -chlorosorbic acid, angelic acid, cinnamic acid, p-chlorocinnamic acid,  $\beta$ -stearylacrylic acid, itaconic acid, citraconic acid, mesaconic acid, glutaconic acid, aconitic acid, maleic acid, fumaric acid, tricarboxyethylene, maleic anhydride, vinyl sulfonic acid, allyl sulfonic acid, vinyl toluene sulfonic acid, styrene sulfonic acid, sulfoethyl acrylate, sulfoethyl methacrylate, sulfopropyl acrylate, sulfopropyl methacrylate, sulfopropyl sulfonic acid, 2-acrylamide-2-methylpropane sulfonic acid, methacryloxy ethyl phosphate, and mixtures thereof.

Application No. 10/522,937 Amendment dated July 31, 2007 Reply to Office Action of April 6, 2007

28. (Previously presented) The method of claim 26 wherein the superabsorbent polymer is selected from the group consisting of poly(acrylic acid), a hydrolyzed starch-acrylonitrile graft copolymer, a starch-acrylic acid graft copolymer, a saponified vinyl acetate-acrylic ester copolymer, a hydrolyzed acrylonitrile copolymer, a hydrolyzed acrylonitrile copolymer, an ethylene-maleic anhydride copolymer, an isobutylene-maleic anhydride copolymer, poly(vinylsulfonic acid), poly(vinylphosphonic acid), poly(vinylphosphonic acid), poly(vinylphosphonic acid), poly(vinylphosphonic acid), poly(vinylphosphonic acid), poly(vinylamine), a poly(dialkylaminoalkyl (meth)acrylamide), a lightly crosslinked polyethylenimine, a poly(allylamine), a poly(allylguanidine), a quaternized polystyrene derivative, a guanidine-modified polystyrene, a quaternized poly((meth)acrylamide) or ester analog, a poly(vinylguanadine), and mixtures thereof.

Docket No.: 29827/40800

29. (Previously presented) The method of claim 26 wherein the neutralized superabsorbent polymer-clay hydrogel particles in step (e) have a degree of neutralization of about 50 to about 80.